

RFI Announcements

MTO Program Managers

July 25, 2025





NGMM Design Challenge



What could you do if you had a stable 3DHI packaging process?

Next-Generation
Microelectronics
Manufacturing
(NGMM) Facility

University of Texas
at Austin

Texas Institute for
Electronics



Three-dimensional
heterogeneously
integrated
microelectronics
(3DHI)

Program Manager: Mr. Michael Holmes

Solicitation: DARPA-SN-25-93

<https://www.darpa.mil/work-with-us/opportunities>



Chemically-Resilient Microsystems



Can we build microsystems that survive in harsh chemical environments?

Grand Prismatic
Springs

Yellowstone
National Park



Source: <https://news.mit.edu/2018/mit-eaps-research-shows-how-life-survives-extreme-environments-1214>

Program Manager: Dr. Huanan Zhang

Solicitation: DARPA-SN-25-90

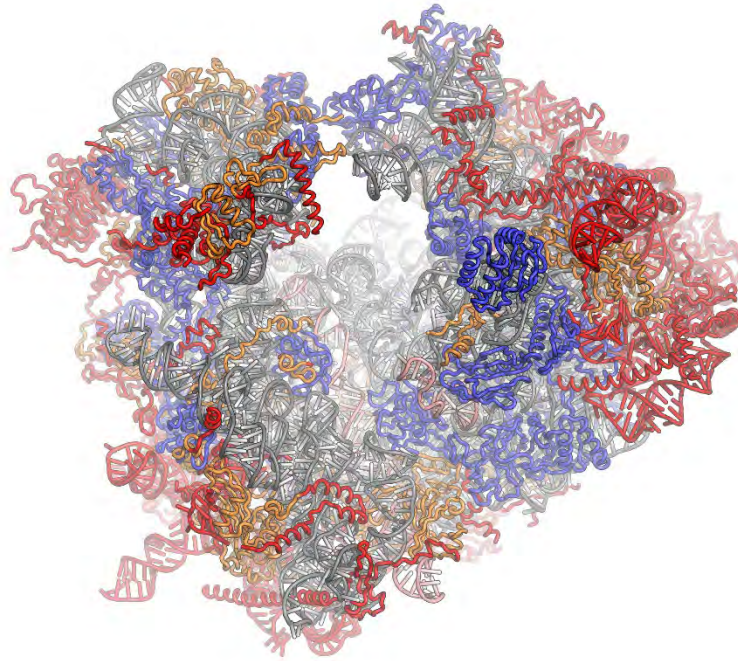
<https://www.darpa.mil/work-with-us/opportunities>



Molecular Machines



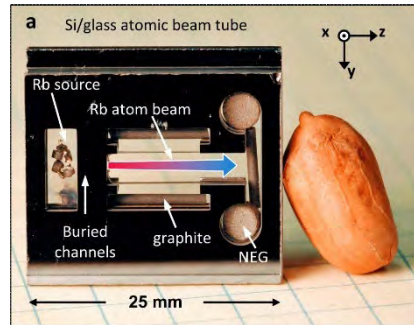
What could I do with a molecular machine?



Source:
https://en.wikipedia.org/wiki/Eukaryotic_ribosome

Program Manager: Dr. John M. Hoffman
Solicitation: DARPA-SN-25-92
<https://www.darpa.mil/work-with-us/opportunities>

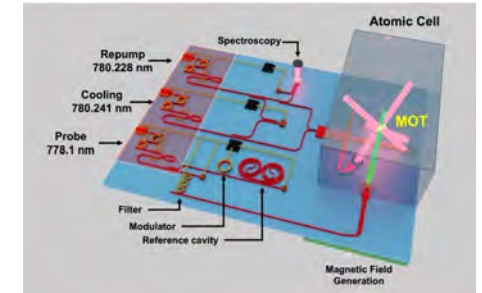
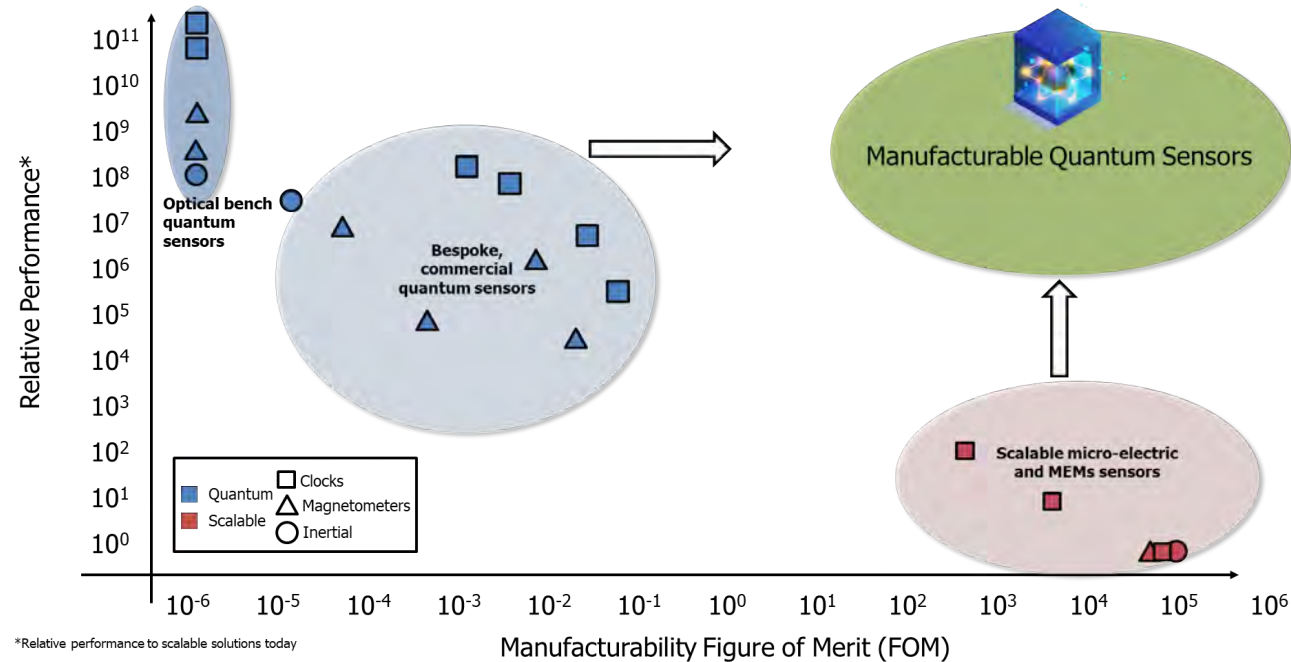
How can we make quantum sensors a commodity product?



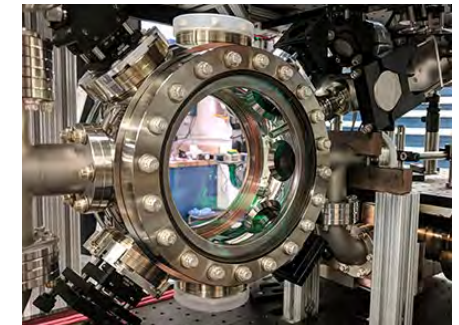
"A chip-scale atomic beam clock"



"Hamamatsu's new quantum sensor technology"



UCSB



Fermilab

Program Manager: Dr. Jonathan Hoffman

Solicitation: DARPA-SN-25-94

<https://www.darpa.mil/work-with-us/opportunities>



American-Made Microsystems



What if we suddenly had to build everything in the United States?



Program Manager: Mr. Daniel Ridge

Solicitation: DARPA-SN-25-89

<https://www.darpa.mil/work-with-us/opportunities>



Microelectronics Black Start



What if TSMC fell into the ocean?



Source: TSMC

Program Manager: Dr. Julian McMorrow

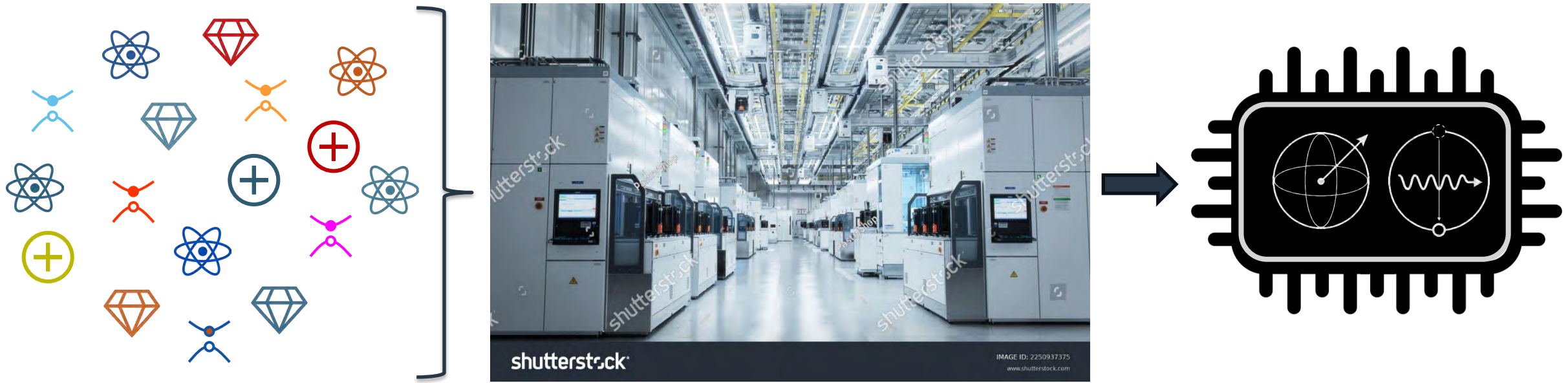
Solicitation: DARPA-SN-25-91

<https://www.darpa.mil/work-with-us/opportunities>



Foundry Interfacing with Quantum Emitters

Can we unify the platforms for quantum integrated photonics?



Source: DARPA

Program Manager: Dr. Justin Cohen

Solicitation: DARPA-SN-25-95

<https://www.darpa.mil/work-with-us/opportunities>



www.darpa.mil